



Cadmium and Cadmium Compounds

Why am I being warned about potential exposure to cadmium and cadmium compounds?



- Cadmium and cadmium compounds are on the <u>Proposition 65</u> list because they can cause cancer. Exposure to cadmium and cadmium compounds can cause cancer of the lung and may cause cancer of the prostate and kidney.
- Cadmium is also on the Proposition 65 list because it can cause birth defects or other reproductive harm. Exposure to cadmium may harm a man's reproductive system. Exposure during pregnancy may affect a child's development.
- Proposition 65 requires businesses to determine if they must provide a warning about significant exposures to <u>listed chemicals</u>.

What is cadmium?

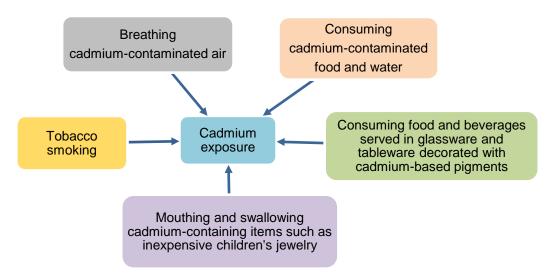
Cadmium is a metal that is found in nature and used in many industries and products. For example, rechargeable nickel-cadmium batteries, labeled NiCd or NiCad, contain cadmium, and are used to power many products, such as cameras, cell phones, and electric cars.

How does exposure to cadmium and cadmium compounds occur?

- Cigarette and other tobacco smoke is the most common way people are exposed to cadmium. Tobacco plants easily absorb cadmium from soil.
- Certain industrial processes, such as metal coating and smelting, can release cadmium into the air.
- Some inexpensive metal jewelry, such as charms intended for children, can cause exposure to cadmium by touching and mouthing the jewelry.
- Cadmium can be released into food and beverages from some bright red, yellow and orange pigments used in decorative paints on some glassware, tableware and pottery.
- Small amounts of cadmium are sometimes detected in water and food, which
 people may consume. California limits the amount of cadmium allowed in
 publicly supplied drinking water.
 - Fish and shellfish can take up cadmium from contaminated water.
 - Plant crops, including potatoes, root crops, leafy vegetables, and fruits grown in soil with elevated cadmium levels can absorb cadmium.

Animals that eat cadmium-contaminated crops can accumulate cadmium in their liver and kidneys. Eating large quantities of certain organ meats, such as liver and kidney, may expose people to cadmium.

Ways you can be exposed to cadmium and cadmium compounds:



During pregnancy cadmium can pass from the mother to the baby.

How can I reduce my exposure to cadmium and cadmium compounds?

- On not smoke. Do not allow children to breathe tobacco smoke.
- ✓ Properly handle and recycle nickel-cadmium <u>batteries</u>.
- On not let children wear or play with inexpensive metal jewelry or charms that contain cadmium.
- ✓ If you do any welding, soldering or other metalworking, be sure that your work area is well-ventilated and use proper protective equipment.
- ✓ Keep children away from soldering and welding fumes and other metal vapor and dusts.
- Limit consumption of shellfish and certain animal organ meats (liver and kidney) to moderate amounts.
- ✓ Eat a well-balanced diet with adequate calcium and iron, which can help reduce the amount of cadmium that your body absorbs.

For more information:

General Cadmium Fact Sheets and Resources

US Department of Health and Human Services

Agency for Toxic Substances and Disease Registry (ATSDR)

▶ Toxic Substances Portal-Cadmium: http://www.atsdr.cdc.gov/toxfaqs/tf.asp?id=47&tid=15

Centers for Disease Control and Prevention (CDC)

Cadmium:

http://www.cdc.gov/biomonitoring/Cadmium_FactSheet.html

- California Environmental Protection Agency (CalEPA) Biomonitoring California
 - Cadmium Fact Sheet http://www.biomonitoring.ca.gov/sites/default/files/downloads/CadmiumFactS heet.pdf

Cadmium in Products:

- Consumer Product Safety Commission (US CPSC)
 - ► Guide for Parents: The Danger of Heavy Metals in Children's Jewelry: http://onsafety.cpsc.gov/blog/2010/01/13/guide-for-parents-the-dangers-of-heavy-metals-in-childrens-jewelry/
 - Cadmium Poisoning: https://www.cpsc.gov/en/Taxonomy/Hazards/Chemical/Cadmium-Poisoning/

Battery Recycling:

- California Environmental Protection Agency (CalEPA)
 California Department of Resources Recycling and Recovery (CalRecycle)
 - Waste Reduction: Batteries https://www.calrecycle.ca.gov/ReduceWaste/Batteries/

Proposition 65:

- California Environmental Protection Agency (CalEPA)
 Office of Environmental Health Hazard Assessment (OEHHA)
 - Proposition 65: Background: https://www.p65warnings.ca.gov/fag
 - Proposition 65: The Chemical List: https://www.p65warnings.ca.gov/chemicals

Scientific Information on Cadmium:

- California Environmental Protection Agency (CalEPA)
 Office of Environmental Health Hazard Assessment (OEHHA)
 - Proposition 65: Reproductive Toxicity of Cadmium: http://oehha.ca.gov/media/downloads/crnr/cd-hid.pdf
 - Public Health Goals for Chemicals in Drinking Water, Cadmium http://oehha.ca.gov/media/downloads/water/chemicals/phg/122206cadmiumphg.pdf
- US Environmental Protection Agency (USEPA)
 - Cadmium Compounds: https://www3.epa.gov/airtoxics/hlthef/cadmium.html